PATIENT & CAREGIVER EDUCATION

Mercaptopurine

This information from UpToDate® Lexidrug™ explains what you need to know about this medication, including what it's used for, how to take it, its side effects, and when to call your healthcare provider.

Brand Names: US

Purixan

Brand Names: Canada

Purinethol

What is this drug used for?

- It is used to treat a type of leukemia.
- It may be given to your child for other reasons. Talk with the doctor.

What do I need to tell the doctor BEFORE my child takes this drug?

All products:

- If your child is allergic to this drug; any part of this drug; or any other drugs, foods, or substances. Tell the doctor about the allergy and what signs your child had.

If your child is breast-feeding a baby:

- Be sure your child does not breast-feed a baby while taking this drug and for 1 week after the last dose.

Tablets:

- If your child has trouble swallowing.

This drug may interact with other drugs or health problems.

Tell the doctor and pharmacist about all of your child's drugs (prescription or OTC, natural products, vitamins) and health problems. You must check to make sure that it is safe to give this drug with all of your child's other drugs and health problems. Do not start, stop, or change the dose of any drug your child takes without checking with the doctor.

What are some things I need to know or do while my child takes this drug?

- Tell all of your child's health care providers that your child is taking this drug. This includes your child's doctors, nurses, pharmacists, and dentists.
- Have your child's blood work and other lab tests checked as you have been told by the doctor.
- This drug may lower the ability of the bone marrow to make blood cells that the body needs. If blood cell counts get very low, this can lead to bleeding problems, infections, or anemia. If you have questions, talk with the doctor.
- Your child may have more chance of getting infections. Have your child wash hands often. Avoid crowds and people with infections, colds, or flu.
- Your child may bleed more easily. Make sure your child is careful and avoids injury. Be sure your child has a soft toothbrush.
- If your child has thiopurine S-methyltransferase (TPMT) or nucleotide diphosphatase (NUDT15) deficiency, talk with your child's doctor.
- Talk with the doctor before your child gets any vaccines. Use of some vaccines with this drug may either raise the chance of very bad infection or make the vaccine not work as well.
- Your child may get sunburned more easily. Avoid lots of sun, sunlamps, and tanning beds. Use sunscreen and dress your child in clothing and eyewear that protects from the sun.

- Drugs that may suppress the immune system like this drug may raise the risk of cancer. If you have questions, talk with the doctor.
- This drug may affect fertility. Fertility problems may lead to not being able to get pregnant or father a child. If your child plans to get pregnant or father a child, talk with the doctor before your child takes this drug.
- If your child is of childbearing age, a pregnancy test will need to be done before starting this drug to make sure your child is not pregnant.

If your child is or may be sexually active:

- This drug may cause harm to the unborn baby or loss of the unborn baby if your child takes it during pregnancy.
- If your child may become pregnant, have your child use birth control while taking this drug and for 6 months after the last dose. If your child gets pregnant, call the doctor right away.
- If your child's sex partner may become pregnant, have them use birth control while taking this drug and for 3 months after the last dose. If your child's partner gets pregnant, call the doctor right away.
- Liver problems have happened in some people who used this drug for inflammatory bowel disease (IBD) during pregnancy. This drug is not approved to treat IBD. Talk with the doctor.

What are some side effects that I need to call my child's doctor about right away?

WARNING/CAUTION: Even though it may be rare, some people may have very bad and sometimes deadly side effects when taking a drug. Tell your child's doctor or get medical help right away if your child has any of the following signs or symptoms that may be related to a very bad side effect:

- Signs of an allergic reaction, like rash; hives; itching; red, swollen, blistered, or peeling skin with or without fever; wheezing; tightness in the chest or throat; trouble breathing, swallowing, or talking; unusual hoarseness; or swelling of the mouth, face, lips, tongue, or throat.
- Signs of infection like fever, chills, very bad sore throat, ear or sinus pain,

cough, more sputum or change in color of sputum, pain with passing urine, mouth sores, or wound that will not heal.

- Signs of bleeding like throwing up or coughing up blood; vomit that looks like coffee grounds; blood in the urine; black, red, or tarry stools; bleeding from the gums; abnormal vaginal bleeding; bruises without a cause or that get bigger; or bleeding you cannot stop.
- A skin lump or growth.
- Change in color or size of a mole.
- Liver problems have happened with this drug. Sometimes, these have been deadly. Call the doctor right away if your child has signs of liver problems like dark urine, tiredness, decreased appetite, upset stomach or stomach pain, light-colored stools, throwing up, or yellow skin or eyes.
- Low blood sugar has happened in people taking this drug, especially children. Signs may be dizziness, headache, feeling sleepy, feeling weak, shaking, a fast heartbeat, confusion, hunger, or sweating. Call your child's doctor right away if your child has any of these signs.
- A rare type of cancer called hepatosplenic T-cell lymphoma (HSTCL) has happened with this drug. These cases have been deadly. Most of the time, these cases happened in teenager or young adult males. Most of these patients were using this drug to treat certain types of bowel problems like Crohn disease and ulcerative colitis. This drug is not approved for use to treat bowel problems like these. Tell your child's doctor if your child has ever had any type of cancer. If you have questions, talk with your child's doctor.
- A very bad and sometimes life-threatening problem called Macrophage Activation Syndrome (MAS) may rarely happen in people with autoimmune diseases. Talk with the doctor.

What are some other side effects of this drug?

All drugs may cause side effects. However, many people have no side effects or only have minor side effects. Call your child's doctor or get medical help if any of these side effects or any other side effects bother your child or do not go

away:

- Feeling tired or weak.
- Diarrhea, throwing up, upset stomach, and decreased appetite are common with this drug. If these happen, talk with your child's doctor about ways to lower these side effects. Call your child's doctor right away if any of these effects bother your child, do not get better, or are severe.

These are not all of the side effects that may occur. If you have questions about side effects, call your child's doctor. Call your child's doctor for medical advice about side effects.

You may report side effects to your national health agency.

How is this drug best given?

Give this drug as ordered by your child's doctor. Read all information given to you. Follow all instructions closely.

All products:

- Give this drug with or without food but give it the same way each time. Always give with food or always give on an empty stomach.
- Have your child drink lots of noncaffeine liquids every day unless told to drink less liquid by your child's doctor.
- The doctor will tell you how to give this drug to your child. Be sure you know how much to give, how often to give this drug, and how to store this drug. If the doctor does not tell you how to give this drug or if you are not sure how to give it, talk with the doctor.
- You will need to take special care when handling this drug. Check with the doctor or pharmacist to see how to handle this drug.
- Do not get this drug on the skin, in the eyes, or on clothes. Remove clothes that have this drug on it. If this drug gets on the skin or in the eyes, rinse with water right away. If a rash, redness, itching, or swelling appears, call the doctor.

Liquid (suspension):

- If the adapter has not been put in the bottle when you get it, follow how to prepare the bottle as you have been told or read the package insert.
- Shake well for at least 30 seconds before each use.
- Measure liquid doses carefully. Use the measuring device that comes with this drug.
- Clean the measuring device as you have been told. If you have questions about cleaning the measuring device, read the package insert or talk with the doctor or pharmacist.
- Put the cap back on after your child is done using a dose.
- This drug is pink to brown in color. This is normal.
- If this drug is spilled, you will need to clean it up in a special way. Check with the doctor or pharmacist if you are not sure how to clean it up.

What do I do if my child misses a dose?

- Skip the missed dose and go back to your child's normal time.
- Do not give 2 doses at the same time or extra doses.
- If you are not sure what to do if your child misses a dose, call the doctor.

How do I store and/or throw out this drug?

All products:

- Store at room temperature in a dry place. Do not store in a bathroom.
- Keep lid tightly closed.
- Keep all drugs in a safe place. Keep all drugs out of the reach of children and pets.
- Throw away unused or expired drugs. Do not flush down a toilet or pour down a drain unless you are told to do so. Check with your pharmacist if you have questions about the best way to throw out drugs. There may be drug take-back programs in your area.

Liquid (suspension):

- Throw away any part not used 8 weeks after opening.

General drug facts

- If your child's symptoms or health problems do not get better or if they become worse, call your child's doctor.
- Do not share your child's drug with others and do not give anyone else's drug to your child.
- Some drugs may have another patient information leaflet. If you have any questions about this drug, please talk with your child's doctor, nurse, pharmacist, or other health care provider.
- If you think there has been an overdose, call your poison control center or get medical care right away. Be ready to tell or show what was taken, how much, and when it happened.

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This generalized information is a limited summary of diagnosis, treatment, and/or medication information. It is not meant to be comprehensive and should be used as a tool to help the user understand and/or assess potential diagnostic and treatment options. It does NOT include all information about conditions, treatments, medications, side effects, or risks that may apply to a specific patient. It is not intended to be medical advice or a substitute for the medical advice, diagnosis, or treatment of a health care provider based on the health care provider's examination and assessment of a patient's specific and unique circumstances. Patients must speak with a health care provider for complete information about their health, medical questions, and treatment options, including any risks or benefits regarding use of medications. This information does not endorse any treatments or medications as safe, effective, or approved for treating a specific patient. UpToDate, Inc. and its affiliates disclaim any warranty or liability relating to this information or the use thereof. The use of this information is governed by the Terms of Use, available at https://www.wolterskluwer.com/en/know/clinical-effectiveness-terms.

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If you have questions or concerns, contact your healthcare provider. A member of your care team will answer Monday through Friday from 9 a.m. to 5 p.m. Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call. If you're not sure how to reach your healthcare provider, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.

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